ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQ./ PURCH. REQUEST NO.	5. PRIORITY
N65540-15-D-0005	N6449820FBB28	2020 Jun 02	1300846512	

6. ISSUED BY CODE N64498
NAVAL SURFACE WARFARE CENTER PHILA
[redacted]
5001 SOUTH BROAD STREET
PHILADELPHIA PA 19112

7. ADMINISTERED BY *(if other than 6)* CODE N64498
NAVAL SURFACE WARFARE CENTER PHILA
5001 SOUTH BROAD STREET
PHILADELPHIA PA 19112

8. DELIVERY FOB
☐ DESTINATION
☒ OTHER
(See Schedule if other)

9. CONTRACTOR CODE 07MU1 FACILITY
NAME AND ADDRESS
GENERAL DYNAMICS INFORMATION TECHNOLOGY, GDIT
[redacted] STE 100
FALLS CHURCH VA 22042-4504

10. DELIVER TO FOB POINT BY (Date) *(YYYYMMMDD)*
SEE SCHEDULE

11. MARK IF BUSINESS IS
☐ SMALL
☐ SMALL DISADVANTAGED
☐ WOMEN-OWNED

12. DISCOUNT TERMS

13. MAIL INVOICES TO THE ADDRESS IN BLOCK
See Item 15

14. SHIP TO CODE N64498
NAVAL SURFACE WARFARE CENTER PHILA
[redacted]
NSWC PHILADELPHIA DIVISION
1601 LANGLEY AVENUE
BLDG 542
PHILADELPHIA PA 19112

15. PAYMENT WILL BE MADE BY CODE HQ0338
DFAS COLUMBUS CENTER,SOUTH ENTITLEMENT O
P.O. BOX 182264
COLUMBUS OH 43218-2264

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER

DELIVERY/ CALL	X	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE		Reference your quote dated Furnish the following on terms specified herein. REF:

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED *(YYYYMMMDD)*

☐ If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE

See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	SEE SCHEDULE				

** If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.*

24. UNITED STATES OF AMERICA
[redacted]
[redacted]
CONTRACTING / ORDERING OFFICER

25. TOTAL $9,953,488.85
26. DIFFERENCES

27a. QUANTITY IN COLUMN 20 HAS BEEN
☐ INSPECTED ☐ RECEIVED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

c. DATE *(YYYYMMMDD)*

d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE

f. TELEPHONE NUMBER

g. E-MAIL ADDRESS

28. SHIP NO.
☐ PARTIAL
☐ FINAL

29. DO VOUCHER NO.

30. INITIALS

31. PAYMENT
☐ COMPLETE
☐ PARTIAL
☐ FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

34. CHECK NUMBER

35. BILL OF LADING NO.

36. I certify this account is correct and proper for payment.

a. DATE *(YYYYMMMDD)*

b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003					[redacted]
	Engineering and Technical Services CPFF DDG Modernization Backfit (DDGM BF) Equipment Electrical Copper/Fiber/COAX Connections and Test Support for DDG 88 (USS PREBLE)				

ESTIMATED COST	[redacted]
FIXED FEE	
TOTAL EST COST + FEE	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AA		1	Lot		[redacted]
	Holding SLIN for CLIN 0003 CPFF This priced SLIN is a holding SLIN for administrative purposes. This SLIN will be reduced with every additional incremental funding modification. The total unfunded ceiling on CLIN 0003 is [redacted] FOB: Destination PSC CD: R425				

ESTIMATED COST	[redacted]
FIXED FEE	
TOTAL EST COST + FEE	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AB		1	Lot		[redacted]

Funding for CLIN 0003
CPFF
Funding provided for DDG Modernization Backfit (DDGM BF) Equipment Electrical Copper/Fiber/COAX Connections and Test Support for DDG 88 (USS PREBLE)
FOB: Destination
PURCHASE REQUEST NUMBER: 1300846512
PSC CD: R425

ESTIMATED COST [redacted]
FIXED FEE
TOTAL EST COST + FEE

ACRN AA
CIN: 130084651200001

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AC		1	Lot		[redacted]

Funding for CLIN 0003
CPFF
Funding provided for DDG Modernization Backfit (DDGM BF) Equipment Electrical Copper/Fiber/COAX Connections and Test Support for DDG 88 (USS PREBLE)
FOB: Destination
PURCHASE REQUEST NUMBER: 1300846512
PSC CD: R425

ESTIMATED COST [redacted]
FIXED FEE
TOTAL EST COST + FEE

ACRN AA
CIN: 130084651200002

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004					[redacted]

Support Costs (ODCs)
COST
Support Costs for DDG Modernization Backfit (DDGM BF) Equipment Electrical Copper/Fiber/COAX Connections and Test Support for DDG 88 (USS PREBLE)

ESTIMATED COST [redacted]

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004AA		1	Lot		[redacted]
	Funding for CLIN 0004 COST Funding provided (ODCs) for DDG Modernization Backfit (DDGM BF) Equipment Electrical Copper/Fiber/COAX Connections and Test Support for DDG 88 (USS PREBLE) FOB: Destination PURCHASE REQUEST NUMBER: 1300846512 PSC CD: R425				
				ESTIMATED COST	[redacted]
	ACRN AA CIN: 130084651200002				

FUNDING

This Awarded Task Order has hereby been incrementally funded in the amount of[redacted]s a result, the total amount of funding obligated and available for payment under this order is[redacted] In accordance with contract clause 52.232-22, Limitation of Funds, the Government is not obligated to reimburse the contractor for any costs in excess of[redacted]unless additional funds are made available and obligated under this order in a subsequent modification. The unfunded remaining amount on this order i[redacted]

GDIT has agreed to cap th[redacted] Labor Category labor rate at [redacted]per hour fully burdened.

The Period of Performance for this order will end on 12 March 2022. This date is firm and will not be extended.

LABOR HOURS

[redacted]

[redacted]

FOIA Exemption B4 Contractor Proprietary and Private

[redacted]

Section C - Descriptions and Specifications

STATEMENT OF WORK

DDG MODERNIZATION BACKFIT (DDGM BF) EQUIPMENT ELECTRICAL COPPER/FIBER/COAX CONNECTIONS AND TEST SUPPORT

DDG 88 (USS PREBLE) STATEMENT OF WORK (SOW)

BACKGROUND:

The Naval Surface Warfare Center Philadelphia Division (NSWCPD), in support of the US Navy's DDG Modernization Back Fit (DDGM BF) Program requires nine alterations to be completed onboard USS PREBLE (DDG 88)

1. SCOPE:

Provide labor, material, installation, and testing support services to accomplish the following DDG Mod Ship Alterations (Core Alts):

S/A 70403K - Digital Fuel Control System
S/A 71604K - MCS/DCS Upgrade
S/A 71615K - DVSS
S/A 71726K - IBNS Upgrade
S/A 73091K – GEDMS
S/A 77427K - Digital Indicators
S/A 77829K - RADAR and TDR TLIS
S/A 84226K – OOD Flat Panel
S/A 84400K – Installation of GPM (MA-714)
C-DR Box Connectorization

1.1. This work will be performed in the majority of the compartments throughout the ship.

1.2. Much of the Equipment, Spaces or Documentation is classified and subject to the applicable provisions of the National Industrial Security Program Operating Manual, DOD 5220.22-M (0584-LP-179-6400).

1.2.1. Confidential Spaces:

- Combat Information Center (1-126-0-C)
- Central Control Station and DC Central (1-268-0-C)
- Combat Systems Maintenance Central, Technical Library and Repair 8 (01–130–0–Q)
- Combat Systems Equipment Room No. 1 (2–53–1–C)
- Combat Systems Equipment Room No. 2 (2–126–2–C)
- Combat Systems Equipment Room No. 3 (1–300–0–C)
- Communication Center (2–126–1–C)
- IC and Gyro Room No. 1 (4–94–0–C)
- IC and Gyro Room No. 2 (3–300–0–C)
- Sonar Equipment Rm 3 (3-18-0-Q)
- Security Forces Issue Room (1-54-1-A)
- Sonar Control Room (2-50-2-C)
- Sonar Equipment Room No. 1 (1-18-0-Q)
- Radar Room No. 1 (03-128-0-C)
- Radar Room No. 2 (03-142-0-C)

2. REFERENCES:

2.1. NAVSEA FY20 Standard Items
2.2. DDG Mod Critical Path Equipment, Cable System to ISEA and Test Requirement Turnover Schedule for DDG 88 USS PREBLE
2.3. SHIPALT DDG-51-01005, 321-8776592 REV A, DMP IDD CABLE ROUTING
2.4. SHIPALT DDG-51-01005, 321-8776593 REV A, DMP CABLE ROUTING (IDD) MN CABLEWAY CHECKPOINT LOCATION
2.5. SHIPALT DDG-51-70403, 438-8773470 REV A, FUEL CONTROL SYSTEM CNSLD ELECTRICAL DWG & ML
2.6. SHIPALT DDG-51-70403, 438-8773471 REV A, FUEL CONTROL SYSTEM WCL
2.7. LAR 70403/DDG88/1180858
2.8. LAR 70403/DDG88/1184638
2.9. RLAR 70403/DDG62/1186032
2.10. RLAR 70403/DDG63/1184201
2.11. RLAR 70403/DDG63/1184551
2.12. RLAR 70403/DDG63/1184873
2.13. RLAR 70403/DDG63/1185008
2.14. RLAR 70403/DDG63/1186684
2.15. RLAR 70403/DDG64/1185599
2.16. RLAR 70403/DDG88/1181515
2.17. SHIPALT DDG-51-71604, 436-8773481 REV A, DDGM MCS/DCS UPGRD FIRE DET SYS ITB CNSLD ELEC MODS & ML
2.18. SHIPALT DDG-51-71604, 431-8773531 REV A, DDGM MCS/DCS UPGRD AUTO HEAT STRESS SYS CNSLD ELEC DWG & ML
2.19. SHIPALT DDG-51-71604, 431-8773532 REV A, DDGM MCS/DCS UPGRD AUTO HEAT STRESS SYS WCL
2.20. SHIPALT DDG-51-71604, 324-8773489 REV A, DDGM MCS/DCS UPGRD THERMAL MONITORING CNSLD ELEC DWG & ML
2.21. SHIPALT DDG-51-71604, 300-8773526 REV A, DDGM MCS/DCS UPGRD UCC, RSC, & DIU CNSLD ELEC DWG & ML
2.22. SHIPALT DDG-51-71604, 300-8773527 REV A, DDGM MCS/DCS UPGRD UCC, RSC, & DIU WCL
2.23. SHIPALT DDG-51-71604, 302-8776653 REV A, DDGM MCS/DCS UPGRD INSTALL POTW AUTOMN ELEC MODS & ML
2.24. LAR 71604/DDG88/1184639 REVISE PRE-PLUG MATERIAL SOURCE CODE FROM GFM TO IAF
2.25. RLAR 71604/DDG63/1184060 REVISE SOURCING FROM GFM TO HSC FOR CONNECTOR TYPE 63D750148G1
2.26. RLAR 71604/DDG63/1185046 ADD CABLE ROUTING IDD TO REFERENCES
2.27. RLAR 71604/DDG73/1183520 Backshell issue at GTM (E4) Connection Point
2.28. RLAR 71604/DDG86/1183016 ADD TEST NOTE TO DRAWING
2.29. RLAR 71604/DDG87/1184564 Correct valve designations for ckts K-2AGT149 & K-2BGT149
2.30. RLAR 71604/DDG88/1182398 INCORRECT BACKSHELL FOR CKTS K-AX514, K-AX515 & K-AX517
2.31. RLAR 71604/DDG88/1182670 REMOVE ICAS HIGH SECURITY FIREWALL SYSTEM

2.32. RLAR 71604/DDG88/1183120 VALVE LP DISCREPENCIES IN MER 1 AND MER 2
2.33. RLAR 71604/DDG88/1183923 REVISE B.U.S FROM UNDERDECK TO ABOVE DECK
2.34. RLAR 71604/DDG88/1184847 Revise Sourcing from “HSC” to “IAF” for CAT 5 Ethernet Cable
2.35. RLAR 71604/DDG88/1185416 SYM 454 Term Box FDN in ER 1 Change from BHD Mounted to Deck Mounted (.01)
2.36. LAR 71604/DDG88/1187613 DDG-88 Vent Damper Miswiring
2.37. SHIPALT DDG-51-71615, 439-8773468 REV A, DIGITAL VIDEO SURVEILLANCE SYSTEM CNSLD ELEC DWG & ML
2.38. LAR 71615/DDG88/1184642
2.39. SHIPALT DDG-51-71726, 428-8776588 REV A, DDGM FULL IBS UPGRD CNSLD ELEC DWG & ML
2.40. SHIPALT DDG-51-71726, 428-8776589 REV A, DDGM FULL IBS UPGRD LIST OF CONNECTIONS
2.41. RLAR 71726/DDG62/1187037
2.42. RLAR 71726/DDG87/1186712
2.43. SHIPALT DDG-51-73091, 184-8773476 REV A, GEDMS AN/USQ-82(V) FOUNDATION MODS & ML
2.44. SHIPALT DDG-51-73091, 431-8773477 REV A,GEDMS AN/USQ-82(V) CNSLD ELEC DWG & ML
2.45. SHIPALT DDG-51-73091, 431-8773478 REV A,GEDMS AN/USQ-82(V) LIST OF CONNECTIONS
2.46. SHIPALT DDG-51-73091, 431-8773479 REV A,GEDMS BACKBONE & NODE INTCON CABLE RTG PLAN
2.47. SHIPALT DDG-51-73091, 512-8773480 REV A, GEDMS AN/USQ-82(V) HVAC & PP MODS & ML
2.48. LAR 73091/DDG79/1186724
2.49. RLAR 73091/DDG87/1186224
2.50. RLAR 73091/DDG87/1186459
2.51. RLAR 73091/DDG88/1187194
2.52. SHIPALT DDG-51-77427, 180-8773486 REV A, DIGITAL INDICATORS STRUCTURAL DRAWING & ML
2.53. SHIPALT DDG-51-77427, 437-8773487 REV A, DIGITAL INDICATORS ELECTRICAL DRAWING & ML
2.54. SHIPALT DDG-51-77427, 437-8773488 REV A, DIGITAL INDICATORS WIRE CONNECTION LIST
2.55. LAR 77427/DDG88/1180862
2.56. LAR 77427/DDG88/1184654
2.57. RLAR 77427/DDG63/1185001
2.58. RLAR 77427/DDG63/1185104
2.59. RLAR 77427/DDG63/1185373
2.60. RLAR 77427/DDG64/1184878
2.61. RLAR 77427/DDG67/1185704

2.62. SHIPALT DDG-51-77829, 437-8773473 REV A, INSTALL TANK SENSORS (RADAR/TDR) ELECTRICAL MODS & ML
2.63. SHIPALT DDG-51-77829, 437-8773474 REV A, INSTALL TANK SENSORS (RADAR/TDR) ELECTRICAL WCL
2.64. LAR 77829/DDG88/1180863
2.65. LAR 77829/DDG88/1184656
2.66. RLAR 77829/DDG63/1185010
2.67. RLAR 77829/DDG73/1186858
2.68. SHIPALT DDG51-84226K, 180-8773690 REV A, OOD FLAT PNL/MFCR STRUCTURAL DRAWING
2.69. SHIPALT DDG51-84226K, 437-8773691 REV A, OOD FLAT PNL/MFCR ELECTRICAL DWG & ML
2.70. SHIPALT DDG51-84226K, 437-8773692 REV A, OOD FLAT PNL/MFCR WIRE
2.71. LAR 84226/DDG88/1184659
2.72. SHIPALT DDG51-84400K, 300-8776663 REV A, GPM REV 3 EP FLIIA MFM REPLMENT CNSLD ELEC MODS & ML
2.73. TISCD-14400 (MA-714)_Base_Change 9
2.74. MA-714_App A_DDG80-90_Change 9
2.75. DDG MOD EQUIPMENT ACCESS & LOADOUT LIST REV A
2.76. 4720–DDG 88/FY20, Ship Alteration Material Summary (4720/3)
2.77. Alteration Installation Team (AIT) Support Services Request
2.78. MIL-STD-2003, Department of Defense Standard Practice Electric Plant Installation Standard Methods (EPISM) for Surface Ships and Submarines
2.79. MIL-STD-1310, Department of Defense Standard Practice Shipboard Bonding, Grounding and Other Techniques for Electromagnetic Compatibility, Electromagnetic Pulse (EMP) Mitigation and Safety
2.80. MIL-DTL-22520G, General Specification for Crimping Tools and Wire Termination
2.81. MIL-STD 2042C (SH) Fiber Optic Topology Installation Standard
2.82. DDG 88 Asset Recovery List, Latest Revision
2.83. MIL-STD-2035, Non Destructive Test Acceptance Criteria
2.84. MIL-STD-1689, Fabrication, Welding and Inspection; Structural
2.85. 8100-3513-0060 REV AD Standard Methods for Mounting ELEC EQUIP less than 75 LBS
2.86. 8100-1281-0223 – Access Panels
2.87. 8100-2400-0013 – Penetration Water Shield for Non-Tight Flats
2.88. 436-8418029 Rev A, Continuous Thermal Monitoring (CTM) System Block Diagram & CTM-Switchgear Interface Control Drawing for DDG-51 Class Modernization Back-fit
2.89. 605-2540769 Rev D, Label Plate Standards
2.90. 320-6598270 Rev H, One Line Diagram Power System 60 HZ
2.91. 302–8418030, No 1 and No 2 Motor Controllers Wiring Modification for Potable Water Control System
2.92. 9252-INFRMT-0219 NSWCPD AIT Test Procedure List – DDG 88
2.93. 9252-INFRMT-0099 NSWCPD DDG 88 Legacy Wiring Discrepancy List
2.94. 9252-INFRMT-0017 NSWCPD MCS Fuse List and Quantity – Rev E
2.95. 9252-INFRMT-0018 NSWCPD DIU EC Battery Installation Procedure – Rev A

2.96. 9252-INFRMT-0019 NSWCPD AIT Special Test Equipment for 514 TPs – Rev C
2.97. 9252-INFRMT-0020 NSWCPD Cable Prep Guidance – Rev D
2.98. 9252-INFRMT-0021 NSWCPD DDGM BF ITB Wiring Harness Installation – Rev B
2.99. 9252-INFRMT-0022 NSWCPD RSC2 UPS Battery Pack Installation Procedure – Rev A
2.100. 9252-INFRMT-0023 NSWCPD UCC Battery Installation Procedure – Rev A
2.101. 9252-INSTR-0213 Ethernet Cable Verification
2.102. 9252-INSTR_0212_DDGM_BF_Shipboard_Ethernet_Cable_Fabrication_and_Verification_RevA
2.103. 3B252B0155_DDGM_UCC_ICAS_Processor_Ripout_(SCD_88260_ERM)_Rev-
2.104. NAVSEA 9090-310G SHIPALT by Alteration Installation Team NSWCPD Installation
2.105. 4720.2F Process and Policy for Shipboard Industrial Work
2.106. S0400-AD-URM-010/TUM, Tag-Out User's Manual
2.107. S0570-AC-CCM-010/8010 Rev A, Industrial Ship Safety Manual for Fire Prevention and Response
2.108. NAVSEA DWG 320-8499816, CCS PRESSURE ZONE 1-4 VENT FAN CONT PNL for Modernization
2.109. Raychem Heat Recoverable EMI Backshell System Connector Manufacturing Procedure Rev 4D
2.110. LM TDP 63D750325, DIU 1-3 INTERCONNECTION DIAGRAM
2.111. LM TDP 63D750328, DIU 4 INTERCONNECTION DIAGRAM
2.112. LM TDP 63D750329, DIU 5 INTERCONNECTION DIAGRAM
2.113. BSE Installation Guide, Latest Revision
2.114. 10001 OD 32382 Bonding and Grounding
2.115. MIL-DTL-24558B TERM BOX
2.116. 240-55101 REV H, OUTLINE AND MOUNTING, VIROE AND ASSEMBLY, DVSS 2
2.117. 240-55103 REV D, OUTLINE AND MOUNTING, CAMERA ASSEMBLY, DVSS 2

The following SIDs are provided for information only and are not for AIT installation:

2.118. SHIPALT DDG-51-70403, 185-8773469 REV A, INSTALL FUEL CONTROL SYSTEM STRUCTURAL MODS & ML
2.119. SHIPALT DDG-51-70403, 541-8773472 REV A, INSTALL FUEL CONTROL SYSTEM PIPING MODS & ML
2.120. SHIPALT DDG-51-71604, 512-8773533 REV A, DDGM MCS/DCS UPGRD AUTO HEAT STRESS SYS MECH MOD & ML
2.121. SHIPALT DDG-51-71604, 113-8773521 REV A, DDGM MCS/DCS UPGRD AMR1/GEN RM FDN ASSY, DET & ML
2.122. SHIPALT DDG-51-71604, 113-8773522 REV A, DDGM MCS/DCS UPGRD CCS/CSMC/CIC/PLTHS FDN ASSY, DET & ML
2.123. SHIPALT DDG-51-71604, 113-8773523 REV A, DDGM MCS/DCS UPGRD ER 1 FDN ASSY, DET & ML

2.124. SHIPALT DDG-51-71604, 113-8773524 REV A, DDGM MCS/DCS UPGRD ER 2 FDN ASSY DET & ML
2.125. SHIPALT DDG-51-71604, 113-8773525 REV A, DDGM MCS/DCS UPGRD RPR LKRS FDN ASSY, DET & ML
2.126. SHIPALT DDG-51-71604, 500-8773528 REV A, DDGM MCS/DCS UPGRD UCC, RSC, & DIU MECH INSTL & ML
2.127. SHIPALT DDG-51-71604, 532-8776654 REV A, DDGM MCS/DCS UPGRD INSTALL POTW AUTOMN PP STRL MODS & ML
2.128. SHIPALT DDG-51-71604, 100-8773520 REV A, DDGM MCS/DCS UPGRD TEMP ACCESS CUT AND INCIDENTAL IMP & ML
2.129. SHIPALT DDG-51-71726, 100-8776586 REV A, DDGM FULL IBS UPGRD TEMP ACCESS CUT AND INCIDENTAL IMPACT
2.130. SHIPALT DDG-51-71726, 184-8776587 REV A, DDGM FULL IBS UPGRD FOUNDATION MOD & ML
2.131. SHIPALT DDG-51-71726, 532-8776591 REV A, DDGM FULL IBS UPGRD PIPING MOD & ML
2.132. SHIPALT DDG-51-71726, 512-8776590 REV A, DDGM FULL IBS UPGRAD HVAC MOD & ML
2.133. SHIPALT DDG-51-77829, 540-8773475 REV A, INSTALL TANK SENSORS (RADAR/TDR) PIPING & STRL MODS & ML

3. REQUIREMENTS:

3.1. The AIT shall take guidance only from the AIT Manager, OSIC and Contracting Officer Representative (COR) for this installation. Any service requests from other parties [In Service Engineering Agent (ISEA), Ship Manager Representative (SMR), Shipyard, etc.] outside the scope of work, will not be approved and please refer them to the AIT Manager, OSIC and the COR.

3.2. The AIT shall provide a single point of contact as the On-Site AIT Lead. The AIT Lead shall coordinate with the waterfront team to include the OSIC, SMR, PMR, and LMA. The AIT Lead shall also coordinate with any of the AIT's subcontractors to ensure proper team efficiency and reporting.

3.3. The AIT shall be responsible for coordinating with government representative in order to remain current on the status of all additional LAR/RLAR actions, as well as any SID revisions, that may impact the Ship Installation Drawing (SID) references and requirements of this SOW.

3.3.1. Conduct a technical review of all existing and new LAR/RLAR releases and/or SID revisions to determine relevance to this SOW.

3.3.2. Develop and submit a cost estimate (both addition and subtraction of cost) to implement any additional LAR/RLAR changes and/or SID revisions that impact requirements of this SOW.

3.4. The AIT shall complete all requirements and adhere to the schedule as detailed on the DDG Mod Critical Path Equipment, Cable System to ISEA and Test Requirement Turnover Schedule, Reference 2.2.

3.4.1. The minimum requirement to meet the turnovers in support of equipment power-up and testing evolutions are as follows:

3.4.1.1. Permanent installation of the equipment, required label plates to include safety and warning labels, ground straps (where required), all required cables dressed in to main and local wireways to the equipment, cables terminated, cables tested, cables properly identified, applicable drawing test notes accomplished, and associated power panel tie-ins complete.

3.4.1.1.1. If turnover milestones are not satisfactorily met, the AIT shall document the deficiencies during the inspection, submit a recovery plan in electronic format to NSWCPD Personnel within 24 hours, and track deficiencies until completion.

3.5. The following requirements are applicable to all ship alterations as well as C-DR Box Management detailed in paragraph 1:

3.5.1. Prior to start of work the AIT shall review 2.3 through 2.71 in order to gain a complete understanding of quantity and type of Installing Activity Furnished (IAF) and consumable materials required to complete the installation.

3.5.2. The AIT shall procure and manufacture prefabricated and onboard electrical connectors and cable assemblies per References 2.3 through 2.71.

3.5.3. The AIT shall remove all equipment/cabling as required by the SIDs, References 2.3 through 2.71.

3.5.4. The AIT must practice proper housekeeping and ensure removal of all trash from working areas at the end of each shift. Electronic spaces are required to be vacuumed at the end of each shift IAW Reference 2.1.

3.5.5. The AIT must use proper containment methods during all hot work to reduce the risk of incidents during the availability IAW Reference 2.1. and local requirements.

3.5.6. Demolition

3.5.6.1. AIT shall provide disposal, transportation, and handling of hazardous waste, lead, heavy metals, asbestos, and PCBs generated as a result of executing this SOW.

3.5.6.2. HAZMAT container shall be provided by the AIT.

3.5.6.3. All scrap material shall be disposed of following local requirements.

3.5.7. Accomplish equipment asset recovery detailed in the Asset Recovery List, Reference 2.82. Accomplish equipment/component removal and protective packing, utilizing ground straps and anti-static bags. Accomplish packing, crating, and shipping of removed equipment and components to the designated POCs as indicated on Reference 2.82.

3.5.7.1. Equipment/components shall be individually labeled with the following information marked clearly and visibly: Stock Number, Manufactures Part Number, removed from Hull number (Ex. Removed from DDG-88).

3.5.7.2. Like equipment/components shall be packaged together for shipment with final packaging reflecting the following: Stock Number, Manufacturers Part Number, removed from Hull number (Ex. Removed from DDG-88), Quantity of Units/Items inside.

3.5.7.3. All equipment/components shall be listed on the outside of each package with the complete part number and stock number if available.

3.5.7.4. DD Form 1149's shall be sent electronically prior to shipment to the OSIC, SMR and [redacted]

3.5.7.5. Packages shall be labeled/re-labeled and shipped to the below address:
Receiving Officer FISC
Philadelphia Naval Business Center
1601 Langley Avenue Building 542E
Philadelphia, PA 19112
[redacted]

3.5.7.6. The AIT shall submit a weekly status report documenting the disposition of items identified in Reference 2.82 to the SMR and OSIC.

3.5.7.7. When ambiguity exists with Reference 2.82, coordinate with the SMR for resolution.

3.5.8. Any equipment that is to be removed and reinstalled by the AIT shall be retained in a secure location.

3.5.9. The AIT shall fabricate and install all foundations in accordance with the SIDs, 2.3 through 2.71, Reference 2.85, and 009-12. This will includes all power panels, switches, transformers, lighting fixtures, phones, speakers, terminal boxes and various electrical/electronic enclosures.

3.5.9.1. The AIT shall apply the specified paint to equipment contact surfaces of foundations installed by the AIT prior to installing the equipment.

3.5.10. All of the foundations listed in references 2.118 through 2.133 shall be installed by the LMA. The mounting hardware for electrical equipment listed in references 2.118 through 2.133 shall be turned over to the AIT for mounting, bolting, and shimming the equipment to the foundation.

3.5.10.1. The LMA shall accomplish all equipment access cuts and associated interference removal, reinstallation, and testing via a Work specification.

3.5.11.The AIT shall accomplish all electrical and mechanical disconnects/reconnects, bonding and grounding of equipment, shimming, unbolting and bolting of all Electrical/Electronic Equipment in references 2.3 through 2.71.

3.5.12. The AIT shall protect all equipment for the alterations listed in paragraph 1 to prevent any damage during and after installation. Protection shall include fire retardant materials such as plastic, plywood or other material as needed IAW Reference 2.1.

3.5.13. The AIT shall accomplish all hot work associated with the required electrical and structural modifications required by references 2.3 through 2.71. This includes welding, burning, grinding, and all other spark producing operations that require a fire watch. This effort is required for installing new, or modifying existing cableways and foundations, and to accommodate new and rerouted cables and enclosures. Cableways may include, but not be limited to cable support brackets, collars, Multiple Cable Transits (MCTs), Multiple Cable Penetrations (MCPs), stack studs, and stuffing tubes.

3.5.13.1. Cableway and equipment structure that is no longer being used due to cable/equipment rip-out is required to be removed it its entirety IAW 009-73 of Reference 2.1 and SIDs, References 2.3 through 2.71.

3.5.14. The AIT shall procure and install filter material for all newly installed DDGM BF equipment intake louvers to protect the newly installed equipment internal components from the industrial environment. Prior to initial equipment power up, the AIT shall thoroughly clean all equipment internals. After initial equipment power up, the AIT shall replace the filter material weekly or more frequently as specified by the OSIC until completion of testing. If the filter material has failed, the AIT must clean the equipment's internals prior to proceeding with testing evolutions. After completion of testing, the AIT shall perform a thorough cleaning of the interior and exterior of all equipment listed in References 2.3 through 2.71.

3.5.15. The AIT shall install all electrical and fiber optic components in accordance with references 2.1, 2.78 through 2.81, and 2.102.

3.5.15.1. Referenced procedures must be rigorously followed to ensure the proper grounding of all cable shields.

3.5.15.2. The AIT shall ensure employees accomplishing work (e.g., installer, QA oversight, direct supervision) on fiber optic systems have accomplished Navy Shipboard fiber optic training and achieved certification IAW 009-73 of Reference 2.1.

3.5.15.3. The AIT shall submit one copy to the GEDMS ISEA in PDF or other approved electronic media form of all required reports relating to installation of cabling to include termination and testing of cabling in accordance with all listed references.

3.5.15.4. The AIT shall fabricate all CAT 5e cables per 2.102.

3.5.15.5. The AIT shall verify all CAT 5e cables per 2.101.

3.5.15.6. The AIT shall submit one copy to the MCS/EC/RSC ISEA in PDF or other approved electronic media form of completed verification called for in reference 2.101.

3.5.16. The AIT shall accomplish the requirements of Standard Item 009-71and 009-107 for new and disturbed piping systems.

3.5.17. The AIT shall maintain the Ship's Permanent Fire Zone Boundaries, IAW reference 2.107, to the extent practicable throughout the availability. This includes maintaining the capability of fire insulation where installed, fire-rated penetrations such as MCTs, MCPs and pipe penetrations, fume-tightness of the boundary, etc. At a minimum, the AIT shall seal these MCTs, MCPs and pipe penetrations with fire retardant cloth when not actually installing cables or pipe through the MCTs, MCPs, or penetrations and at the end of each work shift.

3.5.18. The AIT shall accomplish the requirements of Standard Item 009-32, 009-11, and 009-26 of reference 2.1 for new and disturbed surfaces, lagging and insulation, and deck covering respectively.

3.5.19. The AIT shall conduct thorough cableway inspections of all compartments impacted by this SOW (IAW 009-73) and submit results to the OSIC, SMR, and AIT Manager no later than 25% of contract duration. For discrepancies found after 25% of contract duration, information-only Condition Found Reports (CFRs) shall be submitted to the OSIC and AIT Manager to document legacy discrepancies and as-found conditions

3.5.20. The AIT shall work to de-conflict scheduling issues with the Shipyard, I Level personnel, other AITs on site, and subcontractors. Particular attention should be paid to the LMA's foundation installations, as these areas often require ground studs or cable studs. Efforts should be made to coordinate AIT work prior to LMA restoring paint/lagging to abated areas.

3.5.21. The AIT shall manufacture all wire markers, label plates, and cable tags prior to start of work in accordance with the NAVSEA FY 20 Standard Items and Reference 2.89. Wire markers shall be typed, not hand written. Cable tags shall contain the cable ID number and connector jack number (if applicable) at each end of the cable. The AIT shall manufacture and install new cable tags with associated jack numbers on all legacy cables that are reattached.

3.5.21.1. All permanently installed cables shall have permanent cable tags installed at the termination points and on both sides of decks and/or bulkheads IAW Reference 2.78.

3.5.21.2. All label plates shall be installed in accordance with reference 2.89 and all applicable SIDs.

3.5.21.3. Due to the numerous AITs onboard the ship, opportunity exists for temporary cable ID tags to be unintentionally misplaced. Ensure that all temporary cable ID tags (if utilized) are of a type that will remain attached until permanent cable ID tags are installed.

3.5.22. Cable Tracking Database Requirements **(CDRL A016)**:

3.5.22.1. The AIT shall provide daily on-site support to update the Cable Tracking Database.

3.5.22.1.1. The on-site support personnel shall have the skill set and capability to generate required reports and update the Cable Tracking Database to identify specific data relevant to current and future milestones.

3.5.22.2. The AIT shall update the Cable Tracking Database daily to reflect the status of cable removals, installations, and continuity tests of each electrical/coax/fiber optic cable IAW Reference 2.1.

3.5.22.3. The AIT shall submit an electronic copy of the Cable Tracking Database to NSWCPD personnel no later than noon the day prior to the LMA weekly progress meeting for the duration of the contract.

3.5.22.4. Using the Cable Tracking Database, the AIT shall ensure that all wire markers, cable tags, cable cut sheets, and required material for the termination and quality control of each cable is kitted at least seven (7) days prior to the start of the availability.

3.5.23. The AIT shall open, close, and test each MCT, MCP, and stuffing tube as required to accomplish the requirements of this SOW.
Note: Transit close and test is to be coordinated with the Availability Cableway Manager referenced below:

3.5.23.1. The Availability Cableway Manager shall be responsible for coordinating, integrating and documenting all modernization activity for MCT (Multi- Cable Transit) and MCP (Multi-Cable Penetration), cableway removals, reroutes, installations and modifications impacted by all SEA21 PMS407 modernization Shipalt installations.

3.5.23.2. The AIT shall be responsible for tracking all MCT's openings, closures, and testing related to the alterations referenced in paragraph 1 until completion of installation and testing.

3.5.23.2.1. For each MCT opened, the AIT shall submit a WAF.

3.5.23.2.2. The AIT shall close all MCTs listed in references 2.3 and 2.3 as well as any additional MCTs/MCPs opened by the AIT.

3.5.24. The AIT shall complete all AIT test procedures and support the Government ISEAs with all ISEA test procedures through HM&E Sea Trials.

3.5.24.1. The AIT shall accomplish all testing requirements of the AIT Test Procedure List, reference 2.92 as well as all applicable Test Note requirements of the SIDs, references 2.3 through 2.71. The AIT Test Procedure List details which tests are AIT led and which tests are ISEA led with AIT support. The AIT shall only perform testing when a NSWCPD ISEA is present to witness testing. When the NSWCPD ISEA is absent, testing shall only be performed if prior written approval is provided by NSWCPD.

3.5.24.1.1. The AIT shall anticipate the need for a test and groom team of up to 20 Technicians for the duration of HM&E testing to conduct test procedures and to resolve identified test discrepancies.

3.5.24.2. The AIT shall assist with the coordination between the ship and the test team to ensure all scheduled testing is properly briefed, the required shipboard equipment and support systems are available to support each test, and the proper personnel (both Government and AIT) are scheduled to be on-site to perform each test.

3.5.24.3. The AIT shall provide the equipment listed in the AIT Special Test

Equipment document, Reference 2.96 prior to the start of testing. Special Test equipment referenced in 2.96 may require a long lead-time.

3.5.24.4. The AIT shall procure all fuses per the MCS Fuse List, reference 2.94 prior to start of testing. The AIT shall provide the fuses and LEDs to the Test Team for use during testing. Any leftover fuses and LEDs shall be turnover to ship force and documented on DD Form 1149.

3.5.24.5. The AIT shall provide technical support services for repairs and alterations of legacy shipboard systems, that interface with the alterations listed in this SOW, in order to ensure proper integration and operation of newly installed equipment.

3.5.24.5.1. The AIT shall Accomplish Legacy Wiring Corrections IAW Reference 2.93.

3.5.24.5.2. The AIT shall provide a team for the troubleshooting and correction of Ship's Problem Indication Reports (SPIRs). SPIRs are normally discovered during the testing phase and can be related to both legacy and new installations. The AIT shall provide an up to date status on all assigned SPIRs when requested.

3.5.24.5.3. The AIT shall assist in testing the Damage Control system. This will include testing of each DC sensor, identifying functional discrepancies, troubleshooting, and making minor repairs to include replacing all inoperable sensors, replacing damaged/defective lugs or changing wire markers. In addition, the AIT shall identify any defective circuit cards or channels and any DC legacy items.

3.5.24.5.4. AIT shall procure the extended jackscrew hardware listed in Reference 2.94. The AIT shall assist the MCS ISEAs to replace connector screws on plugs highlighted in the vendor drawings, References 2.110 through 2.112 with extended jackscrews.

3.5.24.5.5. The AIT shall provide an adequate number of communication devices for up to 15 test/troubleshooting teams, with charging capabilities and additional batteries for the completion of testing requirements. The AIT shall be responsible for replacement of any lost or damaged communication devices. Communication devices shall be available to the NSWCPD Test Coordinator at the beginning of the installation through completion of testing.

3.5.24.5.6. The NSWCPD Test Coordinator or SMR shall provide all required test procedures in hardcopy format for completion by the AIT.

3.5.24.5.7. The AIT shall submit the original signed completed test procedures to the Test Coordinator.

3.5.25. The AIT shall provide on-site support personnel for the below listed roles. The personnel may be AIT Contractor or approved AIT Subcontractor:

3.5.25.1. Provide one (1) Test Lead that shall support testing of newly installed DDGM BF propulsion plant equipment and be knowledgeable of the interface between new and legacy equipment. The Test Lead shall be responsible for coordination of the testing with other AIT test technicians. The Test Lead shall generate an electronic daily test status report and send it to the ISEA team, Test Coordinator, and SMR. The test lead shall work with the NSWCPD ISEA, OSIC, Test Coordinator and SMR while planning test efforts and shall assist in the resolution of any discrepancies as they may occur.

3.5.25.2. Provide one (1) AIT WAF/eWAF Coordinator (WAFCOR) that shall be the single point-of-contact between the LMA WAFCOR and Ship's force WAF personnel for work planning and execution in support of modernization. AIT WAFCOR shall submit WAFs in a timely manner, keeping in mind turnaround time for processing WAFs, to support the work required to maintain schedule. WAFs shall only be cleared once the Team Lead or WAFCOR have verified that the work is complete IAW the verbiage and scope of the WAF.

3.5.25.3. Provide one (1) AIT Power Coordinator from the start of the availability until the commencement of Hot Plant Testing that shall assist with the coordination between ships force, LMA, AITs, SMR, and the test team to ensure all equipment installed has power available for testing within 48 hours of the AIT meeting the requirements of the turnovers as identified in Reference 2.1. The Power Coordinator shall have an electrical background, be familiar with tagouts/ESOMS, and be knowledgeable of DDG 60hz/400hz power distribution. The Power Coordinator shall be responsible for ensuring all parties are knowledgeable of equipment tag-out status, working with the WAF/eWAF Coordinator, working with the Test Coordinator, and briefing all parties concerned on the impact to the test schedule, should power not be available for testing. The Power Coordinator shall check all panels for labels to ensure they are being spared/repurposed IAW References 2.3 through 2.71.

3.5.25.4. Provide one (1) safety representative from the start of availability until production is complete. The safety representative shall be onsite daily to provide safety oversight and resolve discrepancies as they occur.

3.5.25.5. Provide one (1) quality assurance representative from the start of availability until production is complete.

3.5.26. The AIT shall provide copies of the Condition Reports to the OSIC, AIT Manager, SMR and the COR as conditions are noted and compilation of all reports at the completion of the installation. All Condition Reports must be submitted with 24 hours of an incident occurring or condition being found. Any Condition Reports that effect the original terms and conditions of the task order requirements must be submitted with an estimate within three days of the incident occurring or condition being found. Price adjustments, if any, must be approved by the Contracting Officer Representative and the Contracting Officer.

3.5.27. The AIT shall procure, ship and provide their own onsite twenty foot conex boxes as required to support the installations (six conex boxes total, two with power). One of the provided conex boxes shall be designated for the use of INCO Spare storage. The LMA will provide laydown areas to accommodate the AIT conex boxes, 120VAC power to the conex boxes if required and handling services at the onsite laydown are such as cranes, riggers and fork-trucks to unload, position and reload the boxes.

3.6. Cable Prefabrication and Procurement Requirements:

3.6.1. The AIT shall procure all cable assemblies and bulk cable listed in references 2.3 through 2.70. This includes but is not limited to all cable, connectors, back-shells, and fittings required to install and fabricate all of the cabling/connectors for this installation.

3.6.1.1. The AIT shall perform as much prefabrication of cable assemblies off ship as possible yet have a cable assembly that can be installed onboard a Naval Vessel. NSWCPD is relying on the AIT's expertise in ship cable installation to determine, when appropriate, which end of a cable assembly to prefab.

3.6.1.2. At award, the AIT shall present NSWCPD with their plan for prefab in the form of a 'MASTER PREFAB CABLE MATRIX' tab in the Microsoft Excel Material Tracking Database (**CDRL A011**) for approval. AIT's MASTER PREFAB CABLE MATRIX shall include a complete listing of all new cable assemblies contained in the SHIPALT electrical drawings 2.3 through 2.70 as well as all existing assemblies being modified by these same drawings, including all LAR/RLARs. For each identified cable assembly, termination kit or loose item the MASTER PREFAB CABLE MATRIX shall contain the following minimum information:

1	**SHIPALT**	4	**Cable Type**		

2	ELECTRICAL DWG No & REV	5	PREFAB ASSY? (Y/N)	7	LAR/RLAR Impacted
3	CIRCUIT NO.	6	PREFAB END (UNIT A, UNIT B or both A/B)	8	NOTES/COMMENTS

3.6.1.3. Each SHIPALT cable type (copper or fiber optic) must identify cable type and which end will be prefabbed (unit A or unit B).

3.6.1.4. AIT shall highlight any material in the MASTER PREFAB CABLE MATRIX affected by a LAR/RLAR and summarize the change in the NOTES/COMMENTS section of the Matrix (i.e. 'length change 100ft to 145ft', 'connector change MS3106R16 10P to MS3406D10-11P', etc.).

3.6.2. Prefabrication of cable assemblies shall be IAW the following prefab selection criteria:

3.6.2.1. Copper Cable Assembly Prefab Criteria:

- Prefab cable assemblies having a cable length equal to or less than 200ft when one end requires a connector.
- Do not prefab any cable assemblies greater than 200ft
- Do not prefab any HELIAX cable assemblies
- Do not prefab any coax cable assemblies
- Prefabrication shall include termination kits for existing cables being modified as specified in the drawing.
- Do not prefab any cable assemblies requiring the use of retained hookup information for pinout of connector.
- Prefabricated cable assemblies shall be terminated on one end only.
- Do not prefab any cable assemblies with EMP fittings.

3.6.2.2. Fiber Optic Cable Assembly Prefab Criteria:

- Regardless of length, prefabricate all fiber optic cables with one connector assembly.
- Do not prefabricate cable ends with ST connectors.

3.6.3. Copper Cable Assembly Requirements:

3.6.3.1. AIT shall adhere to the requirements of 9252-INFRMT-0020 NSWCPD Cable Prep Guidance – Rev D and MIL-STD-2003A documentation for cable prep of all prefab cable assemblies manufactured using back-shell kits containing soft (i.e. heat-shrink/cold-shrink) boots. AIT shall install all back-shell components onto the cable assembly IAW MIL-STD-2003A Cable Prep documentation but shall not shrink the overall shield solder ring or the back-shell heat-shrink boot. These will be heat-shrinked in place by the installing activity on board the ship after cable installation.

3.6.4. Fiber Optic Cable Assembly Requirements

3.6.4.1. AIT shall adhere to the requirements of MIL-STD-2042B documentation for cable prep of all prefab cable assemblies manufactured using back-shell kits containing soft (i.e. heat-shrink/cold-shrink) boots. AIT shall install all back-shell components onto the cable assembly IAW MIL-STD-2042B Cable Prep documentation but shall not shrink the back-shell heat-shrink boot. These will be heat-shrinked in place by the installing activity on board the ship after cable installation.

3.6.4.2. All fiber optic cable assemblies shall be manufactured such that each termini and is polished to achieve a Domed PC Polish IAW MIL-STD-1678-5. For single mode termini an enhanced end face polish shall be achieved.

3.6.5. The AIT shall provide individual termination kits to the shipboard installer for each unterminated cable end of each new cable assembly and for each cable end of existing cable assemblies being modified by the SHIPALT electrical drawings and LARs/RLARs. Termination kits shall be in the form of a clear bag (recommended size: 9" x 12" clear zip-lock bag) containing each of the following:

3.6.5.1. All designated material (i.e., connector, backshell, termini, bulkhead adapter, etc.) required for termination of the unterminated cable end by the field installation activity.

3.6.5.2. A copy of the WCL sheet(s) required for termination of the non-terminated cable end.

3.6.5.3. A cover sheet that clearly identifies the termination kit, its contents and the circuit (i.e., cable assembly) for which it is intended.

3.6.5.4. Termination kit cover sheets shall be clearly visible through the clear bag and shall contain the following minimum required information:

1	SHIP NAME & DESIGNATION
2	SHIPALT
3	ELECTRICAL DWG NO. & REV
4	CIRCUIT NO.
5	UNIT A OR B (FROM WCL FOR UNTERMINATED CABLE END)
6	UNIT NAME UNTERMINATED CABLE END WILL CONNECT TO
7	COMPARTMENT NAME UNTERMINATED CABLE END WILL CONNECT TO
8	COMPARTMENT NO.
9	CABLE TYPE
10	CABLE ITEM NO.
11	CABLE LENGTH
12	LISTING OF ALL GFM/HSC MFR PNs IN TERMINATION KIT

3.6.5.5. Termination kits shall be kitted by SHIPALT electrical drawing and sorted alpha-numerically in boxes by 'CIRCUIT NO.' for ease of locating. Each termination kit box shall be clearly marked with SHIP NAME & DESIGNATION, SHIPALT, ELECTRICAL DWG NO & REV, and range of CIRCUIT Numbers contained in each box (i.e., "C-6TV4-1 thru LC41-1L-B6(2)")

3.6.6. Cable Testing Requirements:

3.6.6.1. Copper Testing:

3.6.6.1.1. The AIT shall test all copper prefab cable assemblies and provide OQE documentation summarizing the results of each required test. OQE Documentation shall be organized in a QA Binder by SHIPALT electrical drawing and sorted alpha-numerically by circuit number. Included in the QA Binder for each prefab cable assembly shall be each of the following:

i. New cable data package for all copper cables as provided by the cable manufactures/suppliers IAW NAVSEA STANDARD ITEM 009-73
ii. Connector Fabrication Sheets completed and signed by a qualified person as defined in NAVSEA STANDARD ITEM 009-73 responsible for terminating and testing the prefab cable assembly
iii. Copper Prefab Cable Assembly Test Sheets showing
iv. Continuity of each conductor through end to end resistance measurements of each terminated conductor
v. Insulation Resistance measurement results of each conductor relative to all other conductors and ground

3.6.6.1.2. Each copper prefab cable assembly shall be 100% tested IAW NAVSEA STANDARD ITEM 009-22.

3.6.6.2. Fiber Optic Testing:

3.6.6.2.1. The AIT shall test all fiber optic prefab cable assemblies and provide OQE documentation summarizing the results of each required test. OQE Documentation shall be organized in a QA Binder by SHIPALT electrical drawing and sorted alpha-numerically by circuit number. Included in the QA Binder for each prefab cable assembly shall be each of the following:

i. New cable data package for all fiber optic cables as provided by the cable manufactures/suppliers IAW NAVSEA STANDARD ITEM 009-123

ii. Connector Fabrication Sheets completed and signed by a qualified person as defined in NAVSEA STANDARD ITEM 009-123 responsible for terminating and testing the prefab cable assembly
iii. Fiber Optic Prefab Cable Assembly Test Sheets showing
iv. Method 6C1 Insertion Loss measurement for each fiber optic link
v. Method 6K1 Return Loss measurement for each single mode fiber optic link
vi. Machine vision visual end face results
vii. Interferometric end face geometry results

3.6.6.3. Each fiber optic prefab cable assembly shall be 100% tested IAW MIL-STD-2042 and NAVSEA STANDARD ITEM 009-123 and include the following requirements:

i. Visual inspection, tested using MIL-STD-2042 Method 6A1
ii. All fiber optic links shall be Insertion Loss tested using MIL-STD-2042 Method 6C1. Maximum allowable Insertion Loss per link shall be 0.75dB.
iii. All fiber optic SM connectors and termini shall be Return Loss tested using MIL-STD-2042 Method 6K1. Minimum cable assembly return loss shall be 40dB.
iv. Each termini end face shall be visually inspected using machine vision with industry standard visual inspection criteria for SM and MM fibers
v. Each termini shall have its end face geometry measured using an interferometer to ensure a proper Domed PC Polish end face geometry is achieved on all termini and ST connectors IAW MIL-STD-1678-5 end face geometry specifications

3.6.7. Material Kitting Requirements

3.6.7.1. Copper Cable

3.6.7.1.1. All prefab cable assemblies shall be kitted by SHIPALT on appropriately sized cable reels or in manageable sized coils such that the cable minimum bend radius is not violated. Any prefab cable assembly kitted on a cable reel shall have the terminated cable end on the inside of the spool.

3.6.7.2. Fiber Optic Cable

3.6.7.2.1. All prefab cable assemblies shall be kitted by SHIPALT on appropriately sized cable reels or in manageable sized coils such that the cable minimum bend radius is not violated. Any prefab cable assembly kitted on a cable reel shall have the terminated cable end on the inside of the spool.

3.6.7.2.2. All fiber optic (FO) cable assemblies having a cable length of 100ft or more shall be kitted on appropriately sized 3 flange cable reels with the terminated end of the cable on the inside of the cable spool and the FO connector protected between the 2nd and 3rd flanges. FO cable assemblies having a cable length of less than 100ft shall be coiled and placed in individual cable boxes.

3.7. Alteration Specific Requirements:

3.7.1. S/A 70403K - AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.4 through 2.16, as well as all other applicable references.

3.7.1.1. For S/A 70403K, the LMA shall be responsible for accomplishing references 2.118 and 2.119.

3.7.2. S/A 71604K - AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.17 through 2.36, as well as all other applicable references.

3.7.2.1. For S/A 71604K, the LMA shall be responsible for accomplishing references 2.120 through 2.128.

3.7.2.2. All wiring between the Data Interface Unit (DIU) connector and the end device shall be completed in accordance with dates listed in the critical path equipment turnover schedule, Reference 2.2.

3.7.2.3. DDGM BF MCS equipment is designed as a floating system. As such, for S/A 71604, inadvertent grounding of cables prevents safe and proper operation of the system. The installer shall practice proper cable fabrication/installation techniques as specified in Reference 2.78. Preferred methods shall be utilized when following Reference 2.78. The installer shall utilize Reference 2.97 to supplement the methods described in Reference 2.78

3.7.2.4. Where shrink-boot back-shells are being used, cables should be connectorized and pinned. Over-shields and back-shells must not be installed until the pinning has been completed and tested satisfactorily.

3.7.2.5. All connectors utilizing a 45-degree or 90-degree back-shell shall be lockwired. Back-shells shall only be lockwired once testing has proven these components to be functional and of sound quality

3.7.2.6. To prevent damage, monitors shall be removed from UCCs and ECs prior to being rigged onto the ship. Monitors shall be properly labeled/identified, protected, and stored in a secure location until installation is directed by the OSIC or SMR.

3.7.2.7. For DIUs 4 and 5, cabling harnesses come from beneath the unit. Prior to rigging the DIUs to the ship, the AIT shall temporarily route the cables harnesses back into the cabinet to avoid damage to the cable harnesses. Typically, cabinet doors will need to be removed by the AIT and cables draped and temporarily secured inside the DIU.

3.7.2.8. The AIT shall install provided UPS batteries in MCS equipment IAW References, 2.95, 2.99, and 2.100. When installing UPS batteries in MCS equipment, care must be taken not to bend mounting rails.

3.7.2.9. For the ICAS Processor Ethernet Ports, The AIT shall procure and install dust caps on jacks 2 & 3 of UCC 1 & 2 (for a total of 4 dust caps). The AIT shall also procure and install two (2) VME slot covers for the ICAS Processor along with screws and retainers (4 of each).

3.7.3. S/A 71615K - AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.37 through 2.38, as well as all other applicable references.

3.7.3.1. For S/A 71615K, all work necessary to install this alteration shall be completed by the AIT.

3.7.3.2. Consult the OSIC, SMR or ISEA if camera viewing angles will be obstructed. Some deviation is acceptable but requires prior written approval.

3.7.4. S/A 71726K - AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.39 through 2.42, as well as all other applicable references.

3.7.4.1. For S/A 71726K, the LMA shall be responsible for accomplishing references 2.129 through 2.132.

3.7.4.2. The AIT shall verify that all cables can be connected to the equipment simultaneously. Due to the angles of the connectors/back-shell assemblies, if the connectors/back-shell assemblies are not properly oriented, then all cables may not be able to be plugged in to the equipment simultaneously.

3.7.4.3. To prevent damage, all console mounted monitors and steering wheel assemblies shall be removed by the AIT prior to the consoles being rigged onto the ship. Monitors and steering wheel assemblies shall be protected and stored in a secure location until installation is directed by the OSIC or SMR.

3.7.5. S/A 73091K - AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.43 through 2.51, as well as all other applicable references.

3.7.5.1. For S/A 73091K, all work necessary to install this alteration shall be completed by the AIT.

3.7.5.2. The AIT shall follow the BSE Installation Guide, Reference 2.113.

3.7.5.2.1. Cables terminated in a heavy duty (multiple terminus) fiber optic connector shall have an additional minimum of 33 centimeters (13 inches) of slack, formed into a service loop and secured to the cableway hanger closest to the equipment utilizing Velcro style straps to provide adequate length for two re-terminations if necessary. For cables that enter equipment by way of stuffing tubes or MCTs/MCPs, there shall be enough slack inside the equipment for a minimum of two re-terminations.

3.7.5.3. The AIT shall accomplish post termination Bandwidth Testing of the GEDMS Raychem Special Purpose cable IAW Test Procedure 42A431C001 of Reference 2.54 no later than the dates identified in Reference 2.2.

3.7.5.3.1. The cable tracking database detailed in Paragraph 5.6 shall be updated daily to reflect status of bandwidth tests.

3.7.5.4. The AIT shall support the ISEAs' recovery of approximately 400 circuit cards.

3.7.5.4.1. The AIT shall provide address for empty triwalls to be shipped to, transport triwalls to shipyard, arrange and coordinate forklift to remove material from truck and crane lift of triwalls to flight deck (or other shipboard location).

3.7.5.4.2. The AIT shall provide three personnel to assist with recovery and inventory of the circuit cards, then arrange for lift of filled triwalls down to pier, and transport triwalls to available pickup location.

3.7.5.4.3. The AIT shall also wrap and prepare the triwalls for shipping providing weights and dimensions of triwalls to ISEA.

3.7.5.4.4. GEDMS PMO will pay for shipping of triwalls; AIT shall coordinate and be available to turn over triwalls to shipping company.

3.7.6. S/A 77427K - AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.52 through 2.61, as well as all other applicable references.

3.7.6.1. For S/A 77427K, all work necessary to install this alteration shall be completed by the AIT.

3.7.7. S/A 77829K - AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment outside of the tanks IWA References 2.62 through 2.67. The AIT is not required to perform work inside of the tanks.

3.7.7.1. The AIT shall accomplish the electrical installation IAW 2.62 through 2.63 in its entirety with the exception of the electrical cable removals inside of the tanks as depicted on sheets 3 through 6 of Reference 2.62, which shall be accomplished by the LMA

3.7.7.2. For S/A 77829K, the LMA shall be responsible for accomplishing Reference 2.133.

3.7.7.3. The NSWCPD ISEA and AIT Test Team shall accomplish the Post Installation Testing. The AIT shall support any troubleshooting/repair efforts to the installed system as they are discovered during ISEA testing.

3.7.8. S/A 84226K- AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.68 through 2.71, as well as other applicable references.

3.7.9. S/A 84400K- AIT shall accomplish the DDGM BF upgrade of all appropriate cabling and equipment according to the SIDs/LARs, References 2.72 through 2.74.

3.7.10. C-DR Box Connectorization (Approximately 40 C-DR Boxes) – AIT shall terminate all cables leading to the C-DR boxes, including cables run by other installing activities for various Ship Alterations. The other installing activities shall provide material required for termination.

3.7.10.1. AIT shall procure and install all missing items to include: cover gaskets, label plates, wire markers, barrel nuts, terminal lugs, terminal boards, and required hardware.

3.7.10.2. The AIT shall properly seal unused cable penetrations, dress existing cables, and provide proper shielding or ground isolation as required.

3.7.10.3. C-DR boxes are required to be submersible to 15' IAW 2.115, therefore any plugs/dorns used to blank holes on a C-DR box must be nylon or an approved substitute that adheres to the watertight requirements.

3.7.10.4. The AIT shall perform continuity testing of all new and re-connected cables terminated in C-DR Boxes.

3.7.10.5. The AIT shall remove all unused legacy cables as identified by the ISEA. As cables are removed and penetrations are no longer needed, plug unsused cable penetrations using watertight methods as previously identified in 3.6.8.4.

3.7.10.6. The AIT shall report weekly to the ISEA, OSIC, and SMR on the status of each C-DR Box with the following information:

3.7.10.6.1. Overall completion, new cables installed at each box, cables terminated at each box, cables tested at each box, notes as to which boxes are ready for inspections or have been tagged in, and listing any issues encountered with the C-DR box connections.

3.7.10.6.2. AIT shall notify the ISEA when the C-DR boxes are ready for inspection and correct any discrepancies discovered by the ISEA. The AIT shall complete all work in the C-DR boxes in accordance with dates listed in the critical path equipment turnover schedule, Reference 2.2.

4. INFORMATION/MATERIAL/SERVICES:

4.1. Government Furnished

4.1.1. NSWCPD shall provide a Shipboard Integrated Test Plan which will be used to test functionality of all new/legacy systems and equipment.

4.1.2. All GFM listed in Reference 2.76 shall be provided to the AIT. The AIT shall take receipt, uncrate, and conduct receiving inspection with a Government Representative.

4.1.2.1. The AIT shall copy the waterfront team (SMR and OSIC) on all requests for GFM material from the LMA Warehouse.

4.1.3. Temporary services are to be provided by the Government via Shipyard IAW Reference 2.77:

4.1.3.1. The AIT shall generate and maintain an electronic tracking database for all temporary services to be provided by the LMA IAW Reference 2.77. This document will be used to provide status of support services to NSWCPD Personnel and the NSA. This database shall be updated daily or as status of required services change and submitted to NSWCPD Personnel.

4.1.3.2. Temporary services to include: ventilation, compressed air, 440VAC & 120VAC power, and lighting.

4.1.3.2.1. Crane and rigging services.

4.1.3.2.2. Laydown area for placement of Conex and/or tool boxes.

4.1.3.2.3. Should services planned to be provided by the shipyard or any other entity not occur, asking the prime contractor to provide such services will require a contractual modification.

4.1.3.2.4. See Reference 2.77 for all services to be provided.

4.2. AIT Furnished Material

4.2.1. The AIT shall provide all applicable Installing Activity Furnished (IAF) material as detailed on the SIDs, with the exception of the drawings listed FOR INFORMATION ONLY. The AIT shall also procure all miscellaneous, incidentals, and consumable material required to complete the installation to include corrections to legacy equipment/systems in support of testing.

5. DELIVERABLES:

5.1. As required by 009-60 of Reference 2.1, the AIT shall provide a detailed installation schedule (MS Project POA&M) that supports the availability milestones and the equipment turnover dates detailed in Reference 2.2, two weeks after award of contract. The AIT will update this POA&M on a weekly basis and more frequently as schedules change, workflow problems occur, or other conditions warrant. This POA&M shall be provided to Ship's Force, LMA, Regional Maintenance Centers (RMCs), NSWCPD representatives, and other activities as necessary to ensure that proper support is available and interferences or delays are minimized. The updated POA&M shall be submitted to NSWCPD personnel no later than noon the day prior to the LMA weekly progress meeting. **(CDRL A003)**.

5.2. Using NAVSEA FY 20 Standard Item 009-04 and References 2.104 & 2.105, the AIT shall develop a QA Workbook to be maintained and updated on-site. This Workbook shall be used to keep an in-process record of Quality Control Inspections and be provided to NSWCPD for review, within sixty (60) days of contract award. A completed copy of the QA Workbook shall be provided to NSWCPD Personnel within two weeks after completion of availability. **(CDRL A004)** The QA Workbook shall be formatted as follows:

5.2.1. Sect. 1 Alteration Description

5.2.2. Sect. 2 Personnel Qualifications and Certifications

5.2.3. Sect. 3 Procedures Objective Quality Evidence (OQE)

5.2.4. Sect. 4 Installation POA&M

5.2.5. Sect. 5 Ship Installation Drawing (SID) List

5.2.6. Sect. 6 Test and Inspection (T&I) Plan – This plan shall identify areas requiring In-Process inspections by annotating steps as Inspection (I), Verification (V), or Government (G) Points. This plan shall also incorporate all testing requirements.

5.2.7. Sect. 7 Test & Inspection Records

5.3. A Financial Status Report shall be assembled by the AIT every two weeks and shall be submitted to the NSWCPD AIT Manager no later than noon the day prior to the LMA weekly progress meeting **(CDRL A002)**.

5.4. The AIT shall attend all daily/weekly production/progress meetings and the daily safety walkthrough as well as provide a weekly physical progress report detailing the installation status to the OSIC and SMR no later than noon the day prior to the LMA weekly progress meeting throughout the project Period of Performance **(CDRL A007)**.

5.5. Prior to start of the availability and utilizing the SIDs, GFM list (Reference 2.76), and DDG Mod Critical Path Equipment/Cable & Test Requirement Turnover Schedule (Reference 2.2), the AIT shall develop a Material Tracking Database detailing material required (GFM, IAF, & Cable Assemblies) to complete the installation and testing.

5.5.1. This database shall include Ship Alteration number, drawing number, material item number, material nomenclature, associated turnover number for material, GFM/IAF status, part number, quantity, location, material request tracking number, date material was requested, date material was received, and the person the material was issued to. This database shall be updated weekly or as material status changes and submitted to NSWCPD Personnel no later than noon the day prior to the LMA weekly progress meeting.

5.5.2. Upon completion of the installation, a final electronic copy of this database shall be submitted to NSWCPD. The AIT shall maintain a list of all deliverable material issued to the ship using a DD 1149. AIT shall provide copies of the

DD 1149's to NSWCPD OSIC or AIT Manager. **(CDRL A011)**

5.6. The AIT shall create a Microsoft Access/Excel Cable Tracking Database utilizing References 2.1 through 2.71. This database shall be used to detail the status of all hook-up sheets, wire markers, coax/copper/fiber optic cable connections, continuity testing progress, as well as the status of any MCTs/MCPs/Boundary Penetrations. This database shall be capable of compiling connection and test information into a connection/test report. This report shall include percentage of cables verified, continuity tested, insulation resistance tested, cut into equipment, connection completed, electrician completing hook-up and electrician completing continuity test. **(CDRL A016)**

5.6.1. The applicable cable removal and installation information of 5.6 shall be included on a list and posted on each piece of equipment (i.e. RSC, DIU, UCC etc.). During hook-up and testing, the electrician shall update this list to reflect progress of work accomplished on a daily basis.

5.6.2. The Cable Tracking Database shall identify each cable by its circuit number, cable type, cable item number and/or cable assembly number, installing activity, boundary penetrations, alteration number, drawing number and applicable sheet number(s), side "A" and side "B" component nomenclatures, side "A" and side "B" component compartment name/number, and associated turnover. List shall contain an assessment of progress by key steps, i.e., "cable removed", "cable run", "boundaries satisfactorily tested", "connectorized", "banded", "tested", "connected', and "complete". The AIT shall ensure the progress can be assessed by including the percentage of completion of cables to be removed, installed, terminated and tested by each ship alteration, drawing and turnover as well as overall percentage of completion of the project.

5.6.3. The Cable Tracking Database shall be sortable and filterable by all data points referenced in the above paragraph.

5.6.4. The Cable Tracking Database shall be delivered to the AIT Manager, OSIC and SMR no later than twenty one (21) days prior to start of availability and weekly throughout the project Period of Performance. The completed version of this database shall be provided to the AIT Manager, OSIC and SMR at the completion of the project.

5.7. The AIT shall turn over 2 sets of complete red-lined drawings to include the LARs/RALRs to the AIT Manager or OSIC for all completed alterations on USS PREBLE (DDG 88) at the end of the availability within 14 days of completion. One set shall be a hard copy that will be delivered to the ship. The other set must be scanned and electronically sent to the AIT Manager for transmittal to the Planning Yard. **(CDRL A008)**

5.8. A Legacy Financial Report shall be assembled by the AIT every week and shall detail the labor hours expended and material used to provide technical support services for repairs and alterations of legacy shipboard systems IAW 3.5.24.5(**CDRL A017)**

6. PLACE OF PERFORMANCE

6.1. San Diego, CA

7. TRAVEL/SCHEDULE AND HOURS OF WORK

7.1. Installation schedule will be determined by the schedule of the USS PREBLE (DDG 88). The availability is scheduled for 09/14/2020 – 03/12/2022.

7.2. The AIT must meet the DDG Mod Critical Path Turnover Schedule, for DDG 88 USS PREBLE (Reference 2.2).

7.3. The work hours shall be Monday through Saturday from 0600 to 1630. These hours may adjust based on progress during the installation. All travel shall be conducted in accordance with FAR 31.205-46, Travel Costs, and B-231-H001 Travel Cost (NAVSEA) and shall be pre-approved by the COR. The Contractor shall submit travel reports in accordance with DI-MGMT-81943 (CDRL A002).

7.4. Travel Costs

7.4.1. The current "maximum per diem" rates are set forth in the (i) Federal Travel Regulations for travel in the Continental United States; (ii) Joint Travel Regulations for Overseas Non-Foreign areas (e.g., Alaska, Hawaii, Guam, Puerto Rico, etc.); and (ii) Department of State (DOS) prescribed rates for foreign overseas locations.

8. OVERTIME

8.1. 11.2. Overtime is authorized for this requirement. Clause 52.222-2 Payment for Overtime Premiums is applicable and will be included in the task order award document.

8.2. For overtime premium costs to be allowable costs; the Contracting Officer is required to approve the performance of overtime prior to the actual performance of overtime. The dollar amount in FAR 52.222-2 shall equal overtime premium negotiated between the Government and the prime contractor. This overtime premium amount shall equal the prime contractor's unburdened premium OT labor costs plus the subcontractors' fully-burdened premium OT labor costs.

9. PERSONNEL

9.1 Personnel Requirements. All persons proposed in key and non-key labor categories shall be U.S. citizens holding at least a current CONFIDENTIAL clearance, or ability to obtain one.

10. CONTRACTING OFFICER'S REPRESENTATIVE (COR):

10.1. The COR for this contract is [redacted].

11. SUBJECT MATTER EXPERT (SME):

11.1. The SME for this installation is [redacted]

12. PERIOD OF PERFORMANCE:

12.1. Date of Award through 03/12/2022.

13. NSWCPD ELECTRONIC COST REPORTING AND FINANCIAL TRACKING (ECRAFT) SYSTEM

13.1. 11.1 In accordance with Clause C-237-W00. The Contractor is required to upload their Contractor's Funds and Man-hour Expenditure Reports in the Electronic Cost Reporting and Financial Tracking (eCRAFT) System.

13.2. 11.2 The contractor agrees to provide supporting accounting system reports, at the Contracting Officer's request, based on the review of the invoice documentation submitted to eCRAFT. This documentation will include reports such as the Job Summary Report (or equivalent), Labor Distribution Report (or equivalent), and General Ledger Detail Report (or equivalent). Supporting labor data provided must include unburdened direct labor rates for each employee and labor category. Cost breakdowns for ODCs, Materials, travel and other non-labor costs must be at the transactional level in sufficient detail so the Government can review allocability to the contract/task order. Indirect costs allocated to direct costs must be shown at the lowest level of detail sufficient to reconcile each indirect rate to the appropriate allocation base.

13.3. 11.3 On invoices containing subcontractor costs, the prime contractor agrees, at the Contracting Officer's request, to attach as supporting documentation all invoices received from subcontractors, unless the subcontractor submits invoices directly to the CO and COR. This requirement applies to all subcontract types (Cost, FFP, etc.).

14. ENTERPRISE-WIDE CONTRACTING MANPOWERREPORTING APPLICATION (ECMRA)

14.1. The Contractor is to report labor hours required for performance of services IAW Clause C-237-H001.

14.2. The Contractor is required to completely fill in all required data fields using the following web address https://www.ecmra.mil.

14.3. Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at https://www.ecmra.mil.

15. SECURITY REQUIREMENTS

15.1. The Contractor is responsible for completing all required Government mandated training to maintain security and network access to government sites and IT systems to include but not limited to: Antiterrorism Level 1 Awareness; DoD Cyber Awareness Challenge; Combatting Human Trafficking; Records Management in the DON: Everyone's Responsibility; Training and Readiness: The Active Shooter; Constitution Day; NAVSEA Introduction to Controlled Unclassified Information; Operations Security (OPSEC); NAVSEA Counterintelligence Training; Privacy and Personally Identifiable Information (PII) Awareness Training; and NAVSEA Physical Security training. Certificates of successful completion shall be sent to the COR and as otherwise specified in the contract. Certificates of successful completion shall be sent to the COR and as otherwise specified in the contract.

15.2. In accordance with SECNAV M-5510.30 Chapters 5 and 6, all Contractor personnel that require access to Department of Navy (DON) information systems and/or work on-site are designated Non-Critical Sensitive/IT-II positions, which require an open investigation or favorable adjudicated National Agency Check (NACLC) by the Industrial Security Clearance Office (DISCO). Investigations should be completed using the SF-86 Form and the SF-87 finger print card. An interim clearance can be granted by the company Security Officer and recorded in the Joint Personnel Adjudication System (JPAS). An open or closed investigation with a favorable adjudication is required prior to issuance of a badge providing access to NSWCPD sites and buildings. If an unfavorable adjudication is determined by DISCO all access will be terminated. For Common Access Card (CAC) card you must have a completed investigation that has been favorably adjudicated or a final security clearance. A CAC Card will not be issued to contractors who have an interim security clearance.

15.3. Contractor personnel that require a badge to work on-site at one of the NSWCPD sites must provide an I-9 form to verify proof of citizenship. The I-9 form should be signed by the company Facility Security Officer or the company Human Resource Department. In addition to the I-9 form, Contractors shall also bring their birth certificate, current United States Passport or naturalization certificate and state issued ID to the NSWCPD Security Officer at the time of badge request to verify citizenship. Finally, contractors shall supply a copy of their OPSEC Training Certificate or other proof that the training has been completed.

15.4. Construction badges for contractor personnel that work on-site at one of the NSWCPD sites will be good for 60 days.

15.5. A Facility Access Determination (FAD) will be completed on any contractor that does not have a favorable adjudicated investigation in JPAS and is requesting swipe/non-swipe access to our buildings in excess of 120 days. Any contractor that has unfavorable information that has not been favorably adjudicated by Department of Defense Central Adjudication Facility (DOD CAF) will not be issued a badge.

15.6. This effort may require access to classified information up to the CONFIDENTIAL level. No classified data will be generated or stored by the Contractor. The Contractor is required to have and maintain a CONFIDENTIAL clearance. The requirements of the attached DD Form 254 apply.

15.7. The Contractor shall appoint a Facility Security Officer (FSO), who shall (1) be responsible for all security aspects of the work performed under this contract, (2) assure compliance with the National Industrial Security Program Operating Manual (NISPOM) (DOD 5220.22-M), and (3) assure compliance with any written instructions from the work site Security POC.

15.8. The Prime Contractor shall:

15.8.1. Forward signed copies of DD254s provided to subcontractors to the Naval Surface Warfare Center Philadelphia Division (NSWCPD), ATTN: Security.

15.8.2. Direct the subcontractor to obtain approval, through the prime Contractor, for the public release of information received or generated by the sub through the prime Contractor.

15.8.3. Submit the subcontractor request for public release through the technical point of contact identified on the DD 254.

15.9. The planned utilization of non-U.S. Citizens in the performance of this contract effort must be identified by name and country of citizenship in the proposal. Foreign Nationals shall not be allowed access to classified or critical program information unless approved on a case by case basis by DSS.

16. RELEASE OF INFORMATION

All technical data provided to the contractor by the Government and/or by the contractor for the Government shall be protected from public disclosure in accordance with the markings contained therein. All other information relating to the items being delivered or services being performed under this delivery order may not be disclosed by any means without prior approval of the authorized representative of the contracting officer. Dissemination or public disclosure includes, but is not limited to: permitting access to such information by foreign nationals or by any other persons on entity, publication or technical or scientific, advertising, or any other proposed public release. The contractor shall provide adequate physical protection to such information so as to preclude access by any person or entity not authorized such access by the Government.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0003	N/A	N/A	N/A	N/A
0003AA	Destination	Government	Destination	Government
0003AB	Destination	Government	Destination	Government
0003AC	Destination	Government	Destination	Government
0004	N/A	N/A	N/A	N/A
0004AA	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
0003	N/A	N/A	N/A	N/A
0003AA	POP 02-JUN-2020 TO 12-MAR-2022	N/A	NAVAL SURFACE WARFARE CENTER PHILA [redacted] NSWC PHILADELPHIA DIVISION 1601 LANGLEY AVENUE BLDG 542 PHILADELPHIA PA 19112 [redacted] FOB: Destination	N64498
0003AB	POP 02-JUN-2020 TO 12-MAR-2022	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	N64498
0003AC	POP 02-JUN-2020 TO 12-MAR-2022	N/A	(SAME AS PREVIOUS LOCATION) FOB: Destination	N64498
0004	N/A	N/A	N/A	N/A
0004AA	POP 02-JUN-2020 TO 12-MAR-2022	N/A	NAVAL SURFACE WARFARE CENTER PHILA [redacted] NSWC PHILADELPHIA DIVISION 1601 LANGLEY AVENUE BLDG 542 PHILADELPHIA PA 19112 [redacted] FOB: Destination	N64498

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 1701810 81DM 251 VU021 0 050120 2D 000000
COST CODE: A00005567902
AMOUNT[redacted]

ACRN	CLIN/SLIN	CIN	AMOUNT
AA	0003AB	130084651200001	[redacted]
	0003AC	130084651200002	
	0004AA	130084651200002	

CLAUSES INCORPORATED BY REFERENCE

52.232-22	Limitation Of Funds	APR 1984

Section H - Special Contract Requirements

CLAUSES INCORPORATED BY FULL TEXT

52.222-2 PAYMENT FOR OVERTIME PREMIUMS (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed [redacted] or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall--

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

* Insert either "zero" or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in paragraph (a)(1) through (a)(4) of the clause.

(End of clause)

C-237-H001 ENTERPRISE-WIDE CONTRACTOR MANPOWER REPORTING APPLICATION (NAVSEA) (OCT 2018)

(a) The contractor shall report contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the Naval Surface Warfare Center Philadelphia Division (NSWCPD) via a secure data collection site. Contracted services excluded from reporting are based on Product Service Codes (PSCs). The excluded PSCs are:

(1) W, Lease/Rental of Equipment;
(2) X, Lease/Rental of Facilities;

(3) Y, Construction of Structures and Facilities; (4) D, Automatic Data Processing and Telecommunications, IT and Telecom- Telecommunications Transmission (D304) and Internet (D322) ONLY;
(5) S, Utilities ONLY;
(6) V, Freight and Shipping ONLY.

(b) The contractor is required to completely fill in all required data fields using the following web address https://www.ecmra.mil.

(c) Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at https://dod.ecmra.support.desk@mail.mil.

(End of text)

C-237-W001 ELECTRONIC COST REPORTING AND FINANCIAL TRACKING (eCRAFT) SYSTEM REPORTING (NAVSEA) (MAY 2019)

(a) The Contractor agrees to upload the Contractor's Funds and Man-hour Expenditure Reports in the Electronic Cost Reporting and Financial Tracking (eCRAFT) System and submit the Contractor's Performance Report on the day and for the same timeframe the contractor submits an invoice into the Wide Area Workflow (WAWF) module on the Procurement Integrated Enterprise Environment (PIEE) system. Compliance with this requirement is a material requirement of this contract. Failure to comply with this requirement may result in contract termination.

(b) The Contract Status Report indicates the progress of work and the status of the program and of all assigned tasks. It informs the Government of existing or potential problem areas.

(c) The Contractor's Fund and Man-hour Expenditure Report reports contractor expenditures for labor, materials, travel, subcontractor usage, and other contract charges.

(1) Access: eCRAFT: Reports are uploaded through the eCRAFT System Periodic Report Utility (EPRU). The EPRU spreadsheet and user manual can be obtained at: http://www.navsea.navy.mil/Home/Warfare-Centers/NUWC-Newport/Partnerships/Commercial-Contracts/Information-eCraft-/ under eCRAFT information. The link for eCRAFT report submission is: https://www.pdrep.csd.disa.mil/pdrep_files/other/ecraft.htm. If you have problems uploading reports, please see the Frequently Asked Questions at the site address above.

(2) Submission and Acceptance/Rejection: The contractor shall submit their reports on the same day and for the same timeframe the contractor submits an invoice in WAWF. The amounts shall be the same. eCRAFT acceptance/rejection will be indicated by e-mail notification from eCRAFT.

(End of text)

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	AUG 2011
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	DEC 2019
252.204-7018	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services	DEC 2019

Section J - List of Documents, Exhibits and Other Attachments

<u>CDRLS</u>
A002 – Financial Status Report
A003 – POA&M
A004 – Quality Assurance Workbook
A007 – Weekly Physical Progress Report
A008 – Red-Lined Ship Installation Drawings
A011 – Material Tracking Database
A016 – Cable Tracking Database
A017 – Legacy Financial Report

Attachment 1 – Government Furnished Material List